

ABSTRACT

A variable reluctance motor is provided having a linear relationship between an input current and an output force. According to one aspect of the invention, the motor comprises a stator, an armature, and at least one magnetic member to provide a biasing force on the armature. According to this characterization, the motor also includes a drive coil to generate an electromagnetic field in response to a current input. The electromagnetic field, in turn, moves the armature relative to the stator during motor operation.